

WHAT IS CLAIMED IS:

1. A method for sequestering and storing CO<sub>2</sub> comprising the steps of:

injecting gaseous carbon dioxide into a subterranean area comprising at least one hydrate of at least one compound, said at least one hydrate having a stability less than carbon dioxide hydrate, whereby said carbon dioxide displaces said at least one compound, forming said carbon dioxide hydrate in said subterranean area and releasing said compound from said subterranean area.

2. A method in accordance with Claim 1, wherein said compound is methane and said at least one hydrate is methane hydrate.

3. A method in accordance with Claim 2 further comprising collecting said methane.

4. A method in accordance with Claim 1, wherein said subterranean area comprises a sea bottom.

5. A method for recovering methane from a subterranean methane hydrate field comprising the step of:

injecting a gaseous stream comprising carbon dioxide into said methane hydrate field, displacing methane in said methane hydrate field, forming carbon dioxide hydrate and displaced methane; and

collecting said displaced methane.

6. A method in accordance with Claim 5, wherein said subterranean methane hydrate field is disposed at a sea bottom.